

Evergreen Technologies, Inc.

AcceleraPCI
Upgrade Platform

FAQ

Frequently Asked Questions

Version 2.0 8/17/99

AcceleraPCI Frequently Asked Questions

- General
- Compatibility
- Installation
- Performance
- Availability
- Pricing
- Tech Support
- Warrantee
- Contact Information

General

What is PCI?

PCI (Peripheral Component Interconnect) is an industry term that describes the “I/O bus architecture” or information pathways and communication of recent model PCs. Intel® introduced this standard at the beginning of the Pentium® processor generation, near the end of the 486 processor generation. Pentium processor-based systems use PCI bus architecture.

The introduction of the PCI bus into the PC architecture guaranteed a fast, inexpensive standard that gave the computer the ability to communicate data as fast as the CPU could process and send it out.

What models of *AcceleraPCI* will Evergreen be releasing in this year?

Evergreen is planning three distinct models:

1. Today's *AcceleraPCI*. A perfect upgrade product for corporate America. Is not compatible with bus-mastering PCI cards.
2. In the third quarter Evergreen will release an *AcceleraPCI* model that is compatible with bus-mastering PCI cards.
3. In the fourth quarter Evergreen will release an *AcceleraPCI* model that specifically addresses Compaq PCs.

What memory can I use with the Evergreen *AcceleraPCI*?

AcceleraPCI uses the latest high performance small form factor memory. This memory type is called SODIMM. *AcceleraPCI* supports up to 256 MB of memory with two memory sockets. The memory type must be PC-66 or PC-100 SDRAM.

What is SODIMM?

SODIMM stands for **S**mall **O**utline **D**ual **I**n-line **M**emory **M**odule. Also used in laptop computers, it provides the same high-bandwidth benefits of a regular DIMM modules in a compact size.

What are PC-66 and PC-100 SDRAM?

These memory types indicate their speed in MHz. They can run at the same bus speed as the motherboards (or other platforms) hosting them, either 66 or 100 MHz. SDRAM is **S**ynchronous **D**ynamic **R**andom **A**ccess **M**emory. This type of memory provides for a substantial increase in performance by running at the same speed as the motherboard bus.

What is Intel's Socket-370 interface?

Socket-370 is a new Intel Celeron® processor interface. Celeron processors were previously available only for Pentium II® processor-based motherboards with the Slot 1 interface. This technology is now available in a PGA (**P**in **G**rid **A**rray) version up to 466 MHz and is used on *AcceleraPCI*.

Can I use more than one *AcceleraPCI* in my system?

No. Currently Evergreen offers only single card, single processor solutions for system upgrades. Evergreen continues to explore future performance enhancement opportunities that are requested by our customers and partners.

Is there anything else on the market like this product?

No. *AcceleraPCI* is unique.

Compatibility**What systems does *AcceleraPCI* work with?**

If you have a Pentium or Pentium w/MMX processor-based system 60 MHz and higher, your system is a candidate for *AcceleraPCI*.

Will *AcceleraPCI* work in my system?

Evergreen's **PreQual™** software will interrogate your system configuration and report whether *AcceleraPCI* is compatible. This program is available through Evergreen's Customer Care Center at 541.757.0934, or on Evergreen's website: www.evertech.com/AcceleraPCI/AcceleraPCI.asp

Will *AcceleraPCI* be compatible with my old BIOS?

Yes. By design, *AcceleraPCI* works in cooperation the host system's BIOS. The system identifies *AcceleraPCI* installed in the system, and then the boot process continues without interruption. Evergreen recommends that you make sure you have the latest BIOS available from your system manufacturer's website.

Is the *AcceleraPCI* Y2K compliant? Does it make my computer compliant?

Yes. *AcceleraPCI* makes your hardware Y2K compliant, but you should verify that your software is Y2K compliant independent of *AcceleraPCI*. If you remove *AcceleraPCI*, your system will no longer be compliant.

Does it matter what operating system I use?

No. *AcceleraPCI* works no matter what operating system and software you use. It works with popular Windows® operating systems, including Windows 98®, Windows 95®, and Windows NT®.

Will *AcceleraPCI* work with all the software I have?

Yes. *AcceleraPCI* works with any commercially distributed, out-of-the-box software.

Will *AcceleraPCI* work for my portable?

No. *AcceleraPCI* is designed for desktop PCs.

Will *AcceleraPCI* work in a Mac with PCI slots?

No. *AcceleraPCI* is only for Intel Pentium processor-compatible PCs.

What processors work with the *AcceleraPCI*?

AcceleraPCI supports 333MHz to 466MHz Intel Celeron, Socket-370 processors.

Installation

Can I install *AcceleraPCI* myself?

Yes. The installation is simple. It is easier to install *AcceleraPCI* than to install memory modules or a video card. A typical installation should take approximately 15 minutes. If you need to rearrange your existing PCI cards to accommodate *AcceleraPCI*, installation will take more time.

Is this product “Plug and Play”?

Yes. “Plug and Play” is a convention that describes an industry standard ease-of-use feature. If a peripheral is “Plug and Play,” you can install it without loading any drivers or making any software changes for it to work. *AcceleraPCI* is a “Plug and Play” device.

Do I need any special hardware other than *AcceleraPCI*?

No, as long as it has the correct Intel Celeron processor and PC-66 or PC-100 memory. *AcceleraPCI* fits into a standard PCI slot and does not require any software drivers to run.

What if the heatsink/cooling fan that comes with the Celeron processor prevents *AcceleraPCI* from fitting into my system?

Evergreen has low-profile cooling solutions that are available for purchase through our Customer Care Center at 541.757.0934.

Do I need Evergreen software to use *AcceleraPCI*?

Yes - the *AcceleraPCI* INSTALL™ disk that ships with the upgrade. This program will identify the components in your computer and provide benchmarks before and after the upgrade, highlighting your performance increase.

What happens if I remove *AcceleraPCI* (only when the system is off)?

Your system will revert to its original configuration automatically.

Should I remove my original CPU and memory?

No. *AcceleraPCI* requires the original CPU and memory to function.

What happens to the original processor and memory in my system?

The original system CPU and main memory must remain in the system. The original CPU and memory are used by *AcceleraPCI* to manage the peripheral devices on the motherboard.

Performance

How much improvement will I get with this product?

It depends on your original system configuration. The benchmark matrix below illustrates *AcceleraPCI*'s performance enhancement based on a typical Pentium processor-based PC configuration

As demonstrated in the graphs below, the performance increase gained from the *AcceleraPCI* is almost three times the performance of the original 233MHz Pentium w/MMX computer. *AcceleraPCI* upgrades Pentium PCs to the performance of comparably configured new PCs.

The following Winstone® 99 benchmark illustrates a three times performance gain over a 233 MHz Pentium PC with MMX™.

Original Pentium PC 233 MHz, 32 MB	Before Upgrading	Upgrading with <i>AcceleraPCI</i> 433 MHz, 128 MB
	9.91	27.50

Based on overall score of Winstone 99 for Windows NT 4.0, service pack 4. Test system configuration: Dell Dimension XPS M233S; 233MHz Pentium w/MMX; Motherboard: Intel TigerEye 512K L2 cache on motherboard, Intel 430VX chipset, Toshiba 16x CDROM, ATX motherboard/chassis form factor, Creative labs Vibra 166 (on board sound) Matrox Millennium 2P, 4MB WRAM.

The following Intel Media benchmark matrix illustrates a four to five times performance gain over the original system performance.

Original Pentium PC CPU Speed (MHz) RAM (MB)	Before Upgrading Pentium	Upgrading with <i>AcceleraPCI</i> 433 MHz, 64 MB
133 MHz, 32 MB	112	494
166 MHz, 32 MB	132	494
200 MHz, 32 MB	154	494

Intel Media Benchmark	Original 133 MHz	Original 166 MHz	Original 200 MHz	Evergreen <i>AcceleraPCI</i> 433/64
Windows 95				
Video	111.26	131.96	154.76	390.32
Image Processing	109.40	133.79	156.36	1698.73
3D Graphics	108.86	131.44	150.87	389.63
Audio	118.95	137.36	156.46	748.07
Overall	112.30	132.22	154.08	494.05
Windows 98				
Video	111.16	131.60	152.80	383.64
Image Processing	111.55	135.10	158.59	1711.02
3D Graphics	94.49	115.13	134.68	389.92
Audio	120.62	137.14	158.32	744.79
Overall	108.70	127.91	148.71	490.00

System configurations: Intel Hitman ATX system board – Gateway 2000 P-5XXX OEM; ATI Rage PCI IIC VGA card; 32 MB EDO DIMM; Intel Pentium Processor at respective speeds; 512k cache on board L2; WD Caviar 13200 3.2 GB HDD; Toshiba 6X CDROM; 1.44 MB floppy disk; Creative Labs CT2890 ISA Vibra 16 Audio card; 3Com 10 BaseT PCI 10/100.

AcceleraPCI card configuration: 370 pin Intel Celeron 433 MHz processor; Intel BX chipset; ROM ver .97 pre beta; 66 MHz bus; Aavid heat sink fan; 64 MB SODIMM SDRAM.

Test details: Winstone 99 ver. 1.0; Intel Media Benchmark ver. 1.0.

Availability

When can I purchase the upgrade?

Please contact Evergreen's Customer Care Center at 541.757.0934 for availability information.

Where can I get SODIMM memory?

You can buy SODIMM memory from any memory reseller.

Pricing

How much does *AcceleraPCI* cost?

The populated version of *AcceleraPCI* is priced at \$399 MSRP, including a 433 MHz Intel Celeron processor and 64 MB of PC-66 SDRAM memory.

Technical Support

What happens if *AcceleraPCI* does not work?

AcceleraPCI ships with an Installation Guide Reference Manual that addresses common problems and questions. If this information is not helpful, please contact Evergreen's Customer Care Center at 541.757.0934. Please be prepared with both the information on the **INSTALL** disk that comes with the upgrade platform and the requested system information at the end of the reference manual.

Where can I find compatibility information?

Compatibility information is available from Evergreen's Customer Care Center at 541.757.0934.

Warranty

What is the warranty period?

AcceleraPCI is covered by a three-year warranty.

Will installing *AcceleraPCI* void my system's warranty?

No. Installing a PCI card is a standard practice. Please check your system documentation for specific information.

How do you handle problems that may occur from memory or a processor that was not purchased through Evergreen?

Evergreen's Technical Support will work with you to diagnose and fix the problem. Please call 541.757.7341 for assistance.

Contact Information

Website

<http://www.everttech.com>

Customer Care Center

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Technical Support

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